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ABSTRACT

This guide is designed to help teachers educate students to be healthier now and in the future. It presents fun, learner-centered activities about nutrition, food, hunger, and food sources. It offers an overview of each section of the Kids Food CyberClub web site, and classroom activities teachers can use to expand on information students will learn by participating in the Web site activities. The guide is organized in a logical sequence, but students should access the sections of the web site in the order they choose. Students are taught lifestyle habits to help them maintain their health and lead a full life. Activities on the web site and corresponding classroom activities develop skills in many subject areas beyond health and nutrition. The guide includes descriptions of each web site section and suggested classroom activities related to the section. Topics include: Finding Your Way on the Kids Food CyberClub Web site; Foods Keep Us Well; USDA Food Guide Pyramid; Rate Your Plate; Choices, Choices, Choices; Grow It Yourself; Books I Love To Read; Your Recipes, Please; Hunger in Our Land; Food Advertising; and Food Facts. Two appendixes offer worksheets for classroom activities and nutrition information for teachers. (SM)

Kids Food CyberClub

Teacher's Guide



Sponsored by The Connecticut Association of Human Services
and Kaiser Permanente

First Edition, September 1997

A project of the

CAHS

Connecticut Association for Human Services

with funding from



Written by Monica Belyea, MPH, RD

www.kidsfood.org

A World Wide Web site for kids, teachers, and parents
to learn about food, nutrition, and health.

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Kids Food CyberClub Teacher's Guide

Introduction

Congratulations! You have chosen an exciting new teaching tool for your classroom that will help your students be healthier and more successful now and in the future. The Kids Food CyberClub web site, created by the Connecticut Association for Human Services with funding from Kaiser Permanente, is devoted to fun, learner centered, activities about nutrition, food, hunger, and food sources. The immediate benefits of your students' healthful eating will be their increased attention span and productive learning. In addition, students will be learning life long habits to help them maintain their health and lead a full life. Another exciting benefit is the opportunity to use Internet technology which will help them keep pace with the ever advancing technology age in which we live.

It is well known that many children who do not eat enough food or do not eat a variety of healthful foods are not able to grow and learn to their full potential. These malnourished children are sick more often and miss more days of school than their well nourished counterparts. The habits your students learn in their early years will be reflected in their health as they age. Parental involvement in the lessons of healthy eating taught in the Kids Food CyberClub will help students form habits for a lifetime. The web site has suggested activities for parents and children related to food and healthy eating behaviors. For parents and families who do not have access to the Internet, or as a system for you to encourage parental involvement, some suggested parental activities are listed in this guide.

The activities on the web site and corresponding classroom activities develop skills in many subject areas beyond Health and Nutrition. These subjects include Earth Science, Social Studies, Math and Language Arts. These subject areas are sometimes worked into the Health and Nutrition lesson and sometimes stand out on their own. For example, students learn classification by categorizing foods into food groups. They learn fractions by measuring ingredients for a recipe. They learn percentages by figuring the percentage of calories from fat in foods. They develop vocabulary and evaluate readings by writing book reports. Some sections of the web site offer students the opportunity to see their thoughts and words published where the world can read them. Life skills, like critical decision making, are also an integral part of the activities on the web site. Students who can think critically to make life decisions will perform better in other subject areas.

This Guide is also available for free download on the CyberClub web site.

For more information about what is contained in this guide see "How to Use This Guide, page 1.

TIPS for implementing the Kids Food CyberClub

1. Even though this guide is sequenced, students should be allowed to choose the sections of the Kids Food CyberClub that they want to explore each time they access it. Allowing them to use different sections will indulge their curiosity and help them retain the information better.
2. To follow student progress as they navigate around the web site, have them print the summary page or another appropriate page of each section they visit. The summary page is either a summary of the concepts of the section or a list of directions to complete another activity.
3. Summary pages and any worksheets or other work the students complete related to the web site can be used to create a booklet students can take home.
4. If your students are not familiar with computers or the Internet, it is recommended that you conduct the first classroom activity, "Finding Your Way on the Kids Food CyberClub Web site", to acquaint the students with the computer and the World Wide Web.
5. Look through the Teachers and Parents sections of the Kids Food CyberClub web site for information and ideas about nutrition education and using technology in the classroom.

About the Connecticut Association for Human Services

The Connecticut Association for Human Services (CAHS), founded in 1910, is widely respected as an independent, non-partisan, advocacy, research, and policy organization which seeks innovative solutions to make our health and human service systems work more productively for low-income citizens. CAHS has a broad group of dues-paying members who include concerned citizens, human service professionals, policy makers, corporate executives, religious and labor leaders.

CAHS is organized into several issue area divisions, including the Hunger, Family Health, Nonprofit, Kids 2000, and Child Care and Early Education Divisions. The main goal of our Hunger Division is to end hunger and malnutrition in our state. While we are supportive of interim, emergency measures, the Division's main objective is to achieve food security for all Connecticut residents, enabling them to obtain, through normal channels, sufficient amounts of quality, culturally-appropriate food to allow for productive and healthy lives. The primary vehicle through which the Division confronts hunger is the Connecticut Anti-Hunger Coalition (CAHC), which includes 350 organizational and individual members.

For more information on CAHS and membership in CAHS, contact: Connecticut Association for Human Services, 110 Bartholomew Avenue, Suite 4030, Hartford CT 06106-2201. Phone: (860) 951-2212. World Wide Web: <http://www.cahs.org>

About Kaiser Permanente

Kaiser Permanente is a not-for-profit group model health maintenance organization, providing health care services to 7.5 million enrollees across 17 states and the District of Columbia. Founded in 1945, it is a partnership between Kaiser Foundation Health Plan and Hospitals and the Permanente Medical Group and is both the oldest and the largest organization of its kind in the world. National headquarters are in Oakland, California; covered states include California, Oregon, Washington, Hawaii, Colorado, Ohio, Texas, Maryland, Virginia, Connecticut, New York, Vermont, Massachusetts, North Carolina, Georgia, Kansas, and Missouri. All told, Kaiser Permanente encompasses more than 75,000 employees and over 10,500 physicians.

Kaiser Permanente has provided funding for the Kids Food CyberClub with the aim of promoting better health for children. This funding is consistent with Kaiser Permanente's 50th anniversary community benefit theme, which will focus on children's health issues through the year 2000. For more information, see the Kaiser Permanente web site at www.kaiperm.org.

Acknowledgements

Our gratitude to the many people and organizations who helped to develop and make possible the CyberClub project, including Kaiser Permanente; Burns Elementary School in Hartford, Connecticut; Organized Parents Make A Difference; the CyberClub advisory committee; Liz Morerro; and Maagnum Resources.

How to Use This Guide

This guide offers an overview of each section of the Kids Food CyberClub web site and activities teachers can use in the classroom to expand on the information students will learn by participating in the activities on the web site.

The sections of the guide are organized in a logical sequence, but students should access the sections of the web site in the order they choose. Even if teachers are using the classroom activities and following the sequence of the guide, it is important to let the students choose the order they will use the sections of the web site.

The introductory classroom activity, "Finding Your Way on the Kids Food CyberClub Web site," should be done before students use the computer, the Internet, and the World Wide Web, if this is their first time using these technologies.

What you will see in this guide:

Web Site Section Title

One line description of the web site section.

Related Subjects and Skills

Students will learn or use skills on the web site related to different disciplines, including: Consumer Science, Health and Nutrition, Language Arts, Math, Science, and Social Studies.

Objectives

Specific objectives for each section of the web site are identified

Teacher Information

Background information to help teachers answer questions and assist students with the web site activity or with the classroom activity.

On the Web Site

A brief description of the activity students will do at the section of the web site and answers to some of the questions or activities students will be completing.

Suggested Classroom Activity Related to the web site section

A lesson plan for an activity related to the section of the web site is given. The web site and classroom activities can usually be done independently. The classroom activity includes time for the students to use the web site. Again, we encourage teachers to let students use the web site in the order they choose, even though the classroom activities follow a logical sequence.

Classroom activities are formatted in the guide similar to the web site sections as described above with Related subjects and skills, Objectives, Materials, and Procedure headings.

* An asterisk within the lesson plan for the classroom activity indicates a break point for classrooms where only one computer can access the Internet at a time. This is the optimal time to allow pairs of students to use the Kids Food CyberClub World Wide Web site while the rest of the class continues on with the lesson plan.

The Kids Food CyberClub can also be used as a classroom computer activity that students use during times of the day when they are allowed to choose their learning medium.

Introductory Classroom Activity :

Finding Your Way on the Kids Food CyberClub Web Site

An introduction to the computer, the web browser software and Internet terminology

Related Subjects and Skills

Computer technology, Language / Vocabulary, Library searching techniques

Objectives

Students will:

1. Learn terms and actions related to the computer and Internet that will help them use the Kids Food CyberClub World Wide Web site.
2. Demonstrate their understanding of computers and appropriate Internet terminology by successfully accessing the Kids Food CyberClub on the World Wide Web and completing the related worksheet.

Materials

1. Chalkboard, Chalk
2. Large ball of yarn
3. Worksheet "Computer Words and Actions"
4. Worksheet "Using a Search Engine to find sites on the World Wide Web"
5. Computer with access to the Internet

Teacher Information

The **Internet** is an electronic network of computers all over the world. People use the Internet for a wide variety of tasks and communication activities. Since its development, the Internet's uses have expanded from simple text transmission like email, to graphical transmission via the World Wide Web, and even live text, audio and video transmission.

The various uses of the Internet are facilitated by different **software** and communication technology. Each of these uses is analogous to a different spoken language. Email transmission is understood by email software and World Wide Web transmission is understood by the **web browser software**. Some of the newer software programs include the capability to communicate in more than one of these "languages."

Connecting to the Internet requires a computer, a **modem**, usually inside or connected to the computer, and an Internet service provider (ISP). The ISP is a company that sells the use of their computer to gain access to the Internet. You use your telephone line to connect to their computer and their computer transfers information back and forth between your computer and the other computers also connected to the Internet. Their computer is called a server.

The **World Wide Web** is a means of transmitting and formatting text and graphics in a code called Hypertext Mark-up Language, or HTML. Each web page is

created and sent to the Internet for people with web browser software to view. The web browser software translates the HTML code into the pictures and text you see on your screen.

A web page is created in a similar manner as a word processing document and saved on a host computer. The host is connected to the Internet at all times, so anyone looking for a web page can find it using its **Uniform Resource Locator** or URL, also called its **web site address**. The web site address is like an address for a person. It tells the computer where to look -- which computer of all the computers linked to the Internet has this web page document saved on it. The web site address usually begins with the organization or company that hosts the web page, and then lists the directory and file for the HTML document. The more specific and correct your web site address, the more likely your chances of finding the web page.

When you view web pages there are several things that can make the process slow. Some of the common ones include:

- Your modem or the modem of a computer between you and the web page host computer is slow.
- Your computer's memory size and its speed are limited.
- Many other people are using the same web site at the same time that you are.

You will notice on most web pages that when you point with your mouse to some words that are underlined and in color and to some pictures, the arrow turns to a hand. These are **hyperlinks** that can take you to other web pages. When clicked with your mouse, these links will lead to other web pages. After you have followed a link, it will appear a different color than ones that you have not followed. To go back to the page you were on before you followed a link, you can press the "back" button of the web browser software or look for a hyperlink that will take you back.

To save yourself time entering the URLs of web pages that you visit often or that you want to return to later you can "**bookmark**" them. When a web page is bookmarked, its URL is saved in the memory of your computer by your web browser software. To go to that page again, you will look in your list of bookmarks and select it. Each bookmark has a title in addition to the URL so you can identify the one you want to access easily.

Information as well as software and other computer files located on a web page can be saved onto your computer by **downloading**. You can also print a web page using your printer. Downloading some kinds of applications and files from the Internet can cause problems for your computer. Computer viruses can be transmitted through some files, and we suggested scanning new files with anti-virus software. (We do not recommend that students download any information without the approval of their teacher or parent!)

A web page can be saved to the hard drive of your computer, in a manner similar to saving a word processing file. In the web browser software, click the File menu, select Save As, find the part of your hard drive you want to save the page in and choose

a name, and click save. To view the saved page as it looked on the web browser, open the web browser software. Do not connect to the Internet. Open the file as you would a file in your word processor.

Finding web pages can be quite a challenge. **Search Engines** are web sites that assist in this task. Each search engine keeps a database of many thousands or millions of web pages. The pages are categorized based on keywords much like any other electronic data base used for finding documents. Using a search engine is very much like using your library's electronic catalog. Each search engine gives tips on how to get the best results. In general, the more specific your keywords are, the closer your match will be. Entering more keywords does NOT necessarily reduce the number of web pages that the search engine will find, but it can make the first few finds more closely matched to what you want to find. The search results are usually sorted in order by the degree to which they match your search request. If you are looking for a specific web page and you cannot find it on the first try, change some keywords, and if that doesn't help, try a different search engine. Like library databases, search engines carry information for many, but not all, web sites.

Some recommended web sites with more information about the Internet and the World Wide Web are located in the Teacher's section of the Kids Food CyberClub web site.

Procedure

1. Assess students' current use and knowledge of computers by asking them to raise their hands in response to the questions below and record their answers. (Optional: Draw a bar graph on the chalkboard. Create a bar for each question and fill in the number of responses. This may be helpful in step 2.)

How many students ...

- a. have used a computer before?
 - b. know what the word software means?
 - c. have used the telephone?
 - d. have a computer at home?
 - e. have a computer in their classroom?
 - f. know what the Internet is?
2. Most students will know how to use the telephone. Relate the ease of using the phone with the ease of using a computer and the Internet; it's easy once you know how to do it.
 3. With the students, begin defining the vocabulary on the Computer Word and Actions worksheet. Use the computer as a model and encourage students to formulate as many definitions as they can. To help students conceptualize the Internet and World Wide Web play the Web game (see "The Web Game" at the end of the lesson plan).

4. When you have finished the Web Game help students define the computer terms on the worksheet that you feel they will have difficulty understanding on their own.
5. Review computer posture, safety and stretch breaks as follows:

Tip 1. Maintain correct and comfortable posture at all times: Sit up straight, look straight into the monitor (eyes should see the top line of the monitor without looking up or down), keep your wrists in their natural position (use a wrist rest if you have one). Stop when any part of your body starts to get uncomfortable.

Tip 2. Take stretch breaks every 30 minutes or so. Do simple stretches, take a walk around the room to get your blood moving.

6. Pair or group students who have used a computer or the Internet before with students who have not.
7. Pass out the "Computer Words and Actions" worksheet and the "Using a Search Engine..." worksheet to students if you have not already.
8. Student pairs/groups can fill out the worksheet together at the computer if there are enough stations for all students to work on the computer at one time. (If there are not enough computers for students to work at the same time, demonstrate on one computer some of the basic steps and terms while all students watch. Send groups to the computer in shifts and have the others complete the worksheet while they wait for their turn on the computer.)
9. Students will need help working with the search engine and understanding what they see when they use it. The search engines advertise products, services, and other web sites. Students may confuse these advertisements for search results.
10. The search engine worksheet directs students to a web page called Kids Can Make a Difference, created by World Hunger Year. Instruct students to go to the Kids Food CyberClub site after they practice using a search engine.
11. Before students leave the computer they should print out a page from the Kids Food CyberClub to include in their folder.

If there is extra time for the students who are waiting or who are finished with the computer, explain the book review section. Let students begin reading and writing book reviews to enter on the computer later.

The Web Game

Materials: One large ball of yarn, students, chalkboard and chalk

Each student represents a computer with Internet access. The ball of string represents the Internet connections. Students demonstrate the Internet by asking permission to "connect" with another student and can make a "connection" when permission is granted.

Rule 1. Students toss the yarn around to each other in any order until everyone has been included. (Students should hang onto the string before they toss it to the next person so that the yarn unwinds as they toss it creating their web.)

Rule 2. Before the ball of yarn can be passed the student passing must first ask permission and the receiver must agree to accept.

Rule 3. Play continues until every student has a connection.

When each student is connected, make a diagram on the chalkboard of the web they have created. (Write each student's name in a circle as they had been standing. Have each student call out the names of students to which s/he has a connection.) Students may sit down.

Discuss what their web represents and how each computer must communicate through an electronic connection. Then ask students to figure out how they would ask a question of a student assuming that they may only "talk" to students they have a direct connection to. Use the diagram of their web to help. For example, Johnny is not connected to Sue, but he is connected to Jose, who is connected to Sue. Johnny can ask Jose to ask Sue his question. If Jose agrees, then Johnny can ask his question through Jose.

When Johnny does ask his question to Sue, ask students to imagine if Johnny and Sue spoke different languages. They would have trouble communicating. There are different languages being spoken on the Internet. The World Wide Web is the one we will be using; email is an example of another language. Each language needs different software to interpret it, and works in a different way. (An alternative analogy: The World Wide Web is like using a fax machine and email is like talking on the phone; they are different methods of communicating. Some things are expressed more easily by talking than by fax and vice versa.)

Nutrition Sleuths

Finding information on the Internet using search engines.

Related Subjects and Skills

Computer Science, Language, Research skills, Curiosity

Objectives

Students will:

1. Follow the steps for using a search engine
2. Find sites using the clues given
3. Use some of the vocabulary words and actions they learned in the introductory classroom activity

On the Web Site

Students are challenged to use a search engine and the clues to find web sites. There can be more than one answer to each clue. Students write down the site addresses for sites that they think match the clues. Teachers should try this exercise ahead and compare your results with what the students find. Students will inevitably find sites that are not listed or that the teacher did not find but are still good matches for the clues. Verify sites as matches by visiting the site.

The Nutrition Sleuths' Worksheet as it appears on the web site:

Sleuth's Worksheet

To print this worksheet click on the print button of your web browser software. You will find the print button near the top of your screen.

Hints for finding things on the web:

1. Go to the search engine.
2. Type words in the searching box that describe what you want to find. Those words are called "keywords".
3. When you are ready click the button near where you typed your keywords that says "search" or "submit". The search engine will find a list of web sites with your keywords in them.
4. If you don't find what you are looking for TRY DIFFERENT KEYWORDS. If that doesn't help, TRY A DIFFERENT SEARCH ENGINE.

Here's a list of things to find on the Internet. When you've found them, print out a page from that site or write down the URL (that's the Web page address), and put a check mark next to each item below. There can be more than one site that matches the description in the clue. If you find different sites than your friends, that's okay. You all could have sites that

match the clues.

Hint: We have included KEYWORDS in each clue to help you find the sites.

1. ___ There's a Broccoli Town in the USA. Find a recipe from Mom's Kitchen in Broccoli Town, USA.
Location _____
2. ___ Find a list of all the Farmers' Markets in the U.S. and find a market near your city.
Location _____
3. ___ Kids can make a difference for hungry people. Find a kids web site about hunger.
Location _____
4. ___ We eat lunch at school every day. Find a site with information about healthy school meals.
Location _____
5. ___ Find a site for farmers that tells them what the weather will be and has other information on farming and agriculture.
Location _____
6. ___ Nutrition is in the news every day. Find a newspaper article on food or nutrition. Use the sites for newspapers listed under the other search engines.
Location _____
7. ___ We are supposed to eat 5 fruits and vegetables every day. Find a site that will help us eat 5-A-Day.
Location _____
8. ___ Find a Cereal City where you can find many breakfast foods and cartoons.
Location _____
9. ___ Find a picture of the Food Guide Pyramid with food groups you can click on to find out more about them.
Location _____

Suggested Classroom Activity Related to Nutrition Sleuths

Related Subjects

Language Arts, Research skills

Objectives

Students will:

1. Learn how to use keywords in researching electronic databases;
2. Follow the directions to find books that relate to the same topics as the clues for finding web sites on the Nutrition Sleuths section of the Kids Food CyberClub.

Materials

1. Worksheet "Using a Search Engine to find sites on the World Wide Web;"
2. The Nutrition Sleuth's worksheet from the Kids Food CyberClub web site, in the Nutrition Sleuths section, listing clues for the World Wide Web scavenger hunt (see above).
3. School library with electronic catalogs.

Procedure

1. Explain how to use keywords in a search for books on a library catalog. (A school librarian may be helpful for this activity.)
2. Give each student a copy of the worksheet and the clues sheet.
3. Instruct them to find library books using the same clues given for finding web sites.

Other Activity Suggestions

Plan a scavenger hunt using clues similar to the ones on the web site but that could describe items in your classroom or school.

Foods Keeps Us Well

An introduction to the relationship between food and health

Related subjects and skills

Health, Biology, Social studies (diversity), Art (drawing)

Objectives

Students will:

1. Learn that food fuels the body;
2. Learn that different foods supply different nutrients;
3. Recognize the relationship between food and health.

Teacher Information

Please refer to Appendix B, Nutrition Information for Teachers, and the USDA web site, www.nalusda.gov/fnic/Fpyr/pyramid.html, for nutrition information to help you answer questions and lead the discussion. On the USDA web site you will find a guide for teaching the Food Guide Pyramid. It has information about why it looks the way it does, serving sizes, foods in each group, and menus that correspond to different calorie levels. The guide can be downloaded and viewed using Adobe Acrobat software, also available on the site.

On the Web Site

Students are asked a series of questions about foods (as categorized by the USDA Food Guide Pyramid), the major nutrients supplied, and the effect on the student's growth and health. Each question has only one correct answer. If a student selects the wrong answer s/he is given a response message that states why the answer is wrong and a hyperlink back to the question to submit another answer. When the student answers correctly s/he is given a response that states why the answer is correct and a hyperlink to the next question. Question topics range from "foods that supply energy" to "fiber". Answering all the questions correctly brings the student to the end of the section. The last page summarizes the information in the questions. Students may continue from this section to the section "USDA Food Guide Pyramid" or return to the clubhouse and choose a different section.

The questions and correct answers on the web site (abbreviated here):

1. Choose the food group that gives us ENERGY, then click the Answer button. A: Bread, Cereal, Rice, Pasta group and Fruits group.
2. Choose the food group that has most of the PROTEIN we need? A: Meats, Poultry, Fish, Dry A: Beans and Peas, Eggs and Nuts
3. Do you know which of the food groups has protein, calcium, and energy? A: Milk, Yogurt, Cheese

4. Can you choose another food group from the list below that has foods that have calcium, protein, and energy in them? A: Vegetables
5. Can you choose the list of foods with fiber? A: raw apple, bran cereal, baked potato with the peeling
6. Can you pick out the foods that might be bad for our blood vessels? A: Fat from animals like butter, cream, and in meat and poultry
7. How do we know if we are getting enough of the good foods, and that we are not eating too much of the not-so-good foods? There is a guide to help us eat the right foods every day. Do you know what it is called? Click on the one you think is the answer and then click on the Answer button to find out if you are right. A: Food Guide Pyramid

Suggested Classroom Activity Related to Food Keeps Us Well

Related Subjects and Skills

Health, Biology, Social studies (diversity), Drawing shapes

Objectives

Students will:

1. Learn the major nutrients in food.
2. Realize the relationship between food and health, both immediate health and long term health.
3. Discuss diversity in people and food.

Materials

1. Butcher paper or other large paper on a roll
2. Markers or crayons
3. Colored paper or crayons, five different colors to represent the different nutrient groups
4. Glue (only if using the colored paper)
5. Masking tape or other material to hang students' posters

Procedure

1. Pair students. Pass out a sheet of paper to each student and a marker to each pair. Instruct students to take turns tracing and being traced onto the paper.
2. Discuss the concept of variety. When students are finished tracing, have them tape tracings to a wall or other appropriate surface. Have students look at each outline. Ask if they think everyone is the same shape or if we are all different shapes. (We also have different colors, voices, beliefs and many other differences.) Ask students to raise their hand if they like liver. Ask some other foods they might like or dislike. Then ask if everyone likes the same foods or if we like different foods. Explain that we all need food even though we like different kinds of foods. Ask what would happen if we didn't eat? How would we grow, think, or play?

3. Ask if foods are all the same or different? We need to eat some of everything to make our bodies healthy and to satisfy our taste buds because foods are all different too.
4. Ask if any students have found a part of the Kids Food CyberClub web site that has some of this information in it. (This may help the students relate the class activity to what they have done on the web site and recall some of that information.)
5. Ask if anyone knows what nutrients are. Ask students to name the nutrients. Write the nutrients on the chalkboard and define them.
6. Ask about water. Do we need water too?
7. Explain to students that they will draw or paste cutouts on their outlines to show how they need nutrients. *
 - green squares = carbohydrates
 - red ovals = protein
 - orange circles = fat
 - blue rectangles = water
 - purple diamonds = vitamins and minerals
8. Instruct students to go to the Kids Food CyberClub web site and explore it. They may need the web site address to find the site as it may not be registered with all of the search engines or it may take them longer to search for it. Be sure to have students print a page from the web site section(s) they visit to include in their folder.

* See "How to Use This Guide" page 1 for more information.

USDA Food Guide Pyramid

Introduction to the Food Guide Pyramid

Related Subjects and Skills

Health and Nutrition, Geometry / Spatial relationships and dimensions

Objectives

Students will:

1. Learn the names and number of servings of each food group of the USDA Food Guide Pyramid;
2. Categorize foods according to the food groups of the USDA Food Guide Pyramid

Teacher Information

Please refer to Appendix B, Nutrition Information for Teachers, and the USDA web site, www.nalusda.gov/fnic/Fpyr/pyramid.html, for nutrition information to help you answer questions and lead the discussion. On the USDA web site you will find a guide for teaching the Food Guide Pyramid. It has information about why it looks the way it does, serving sizes, foods in each group, and menus that correspond to different calorie levels. The guide can be downloaded and viewed using Adobe Acrobat software, also available through the site.

On the Web Site

This section helps students learn the food groups and number of servings of each by answering a series of questions. As they respond to the questions correctly, they build their pyramid. After building their pyramid, they are shown a summary page about the USDA Food Guide Pyramid and the recommendations that they can print for their portfolio or to show their parents. From this section, students can follow hyperlinks to the Rate Your Plate, Nutrition Sleuths, and My Food Choices Can Help the Earth be Healthy sections of the web site.

Questions and correct answers from the web site (abbreviated here):

1. How many food groups are in the Food Guide Pyramid? C. 5
2. Why are there six spaces in the Food Guide Pyramid? B. It is Fat's Oils, Sweets. These are part of the other food groups and should be eaten moderately
3. The base of the pyramid are foods we eat the most. True
4. Name the group at the base. C. Bread, Cereal, Rice and Pasta
5. How many servings from the Bread, Cereal, Rice, Pasta group? B. 6-11
6. Name the group of plants, has lots of vitamins...? B. Vegetables
7. How many Vegetable servings should we eat every day? B. 3-5
8. Name the group that is usually sweet and juicy... B. Fruits
9. How many servings of Fruit should we eat? B. 2-4

10. Name the group that comes from both plants and animals. Its foods give us most of the protein we need. B. Meat, Poultry, Fish, Dry Beans and Peas, Eggs and Nuts
11. How many servings in the Meat, Poultry, Fish, Dry Beans and Peas, Eggs and Nuts group do we need everyday? A. 2-4 servings or 5-7 ounces
12. This group has Calcium for our bones and teeth...B. Milk, Yogurt, Cheese
13. How many servings of Milk, Yogurt and Cheese every day? C. 2 - 3
14. The sixth space of the Food Guide Pyramid, the point at the top, is the Fats and Sweets foods. We learned that earlier. What does the Food Guide Pyramid remind us to do with these foods? A. They should only be eaten sparingly.
15. The foods in the bottom part of the pyramid have something in common. A. The foods at the bottom all come from plants.

Suggested Classroom Activity Related to the Food Guide Pyramid

Related Subjects and Skills

Health and Nutrition, Geometry

Objectives

Students will:

1. Learn the names and number of servings of each food group of the USDA Food Guide Pyramid;
2. Categorize foods according to the food groups of the USDA Food Guide Pyramid.

Materials

(For all worksheets, see Appendix A)

1. Worksheet "My Food Guide Pyramid" photocopied for each student
2. Worksheets "Plant foods" and "Animal foods" photocopied onto different colored paper
3. Poster or drawing of the USDA Food Guide Pyramid

Procedure

1. Pass out a sheet of scrap paper and instruct students to write five foods. The foods may be their favorite foods or any foods students can recall.
2. Give each student a copy of the worksheet "My Food Guide Pyramid."
3. Using a drawing or poster of the USDA Food Guide Pyramid (FGP), explain the food groups. Write the name, the number of servings and some foods that fall into each group. Also discuss the main nutrients of the foods in each group. For example, the Bread Cereal, Rice and Pasta group is made primarily of carbohydrates. Students should follow along by writing in the names and number of servings as they are discussed.

4. Ask students to classify potato chips into one of the groups of the FGP. Ask why potato chips can go into one of the food groups but peppermint candy is at the top of the pyramid. (Answer: Potato Chips are mostly potatoes even though they have lots of fat. Peppermint candy is mostly sugar.) Ask what the circles and triangles inside each food group represent. (Answer: sugar and fat. Like potato chips, there are foods in each group that have sugar and fat. The circles and triangles remind us that some of the foods in each group are high in fat and sugar and should only be chosen once in a while.)
5. Introduce the concept of anytime, sometimes, and sparingly by asking students to define each word. Remind students of the discussion about diversity in "Food Keeps Us Well", foods in each category are similar but still diverse. There are foods in each food group that do NOT help us be well. Ask students to name foods that would fit into each category: Anytime, Sometimes, Sparingly.*
6. Pair or group students. Instruct each group to work together to try to categorize their foods into the groups of the pyramid. Each student should categorize the foods they listed on their own sheet and help each other decide if they are putting their foods into the correct category. Student should think of and write foods into any empty sections of their food guide pyramid worksheet. In the Pyramid resource on the USDA web site there are lists of foods that fall into each food group and the serving sizes of each to help you check students' answers.
7. Ask students what the bottom foods might all have in common? Where do they come from? Are they all plants or animals?
8. Ask students if they understand why the foods at the bottom of the pyramid are at the bottom? If possible, use a 3-D model to show the volume and space each group occupies and the relationship to the number servings and our diet.
9. Discuss the connection between the bottom three food groups (they all come from plants). Encourage students to discuss the origin of their food. Instruct students to tape the colored paper "flap" over the bottom groups and label the flap "Plants," then repeat for the top groups except label "animals". Ask students if they understand what this means in terms of our diet. Should it be mostly plants or mostly animals? Is their diet right now mostly plants or mostly animals?
10. Direct students to the computer and instruct them to go to the Kids Food CyberClub web site and explore it. Be sure to have students print a page from the web site section(s) they visit to include in their folder.

If there is enough time, construct a 3-D model of the Food Guide Pyramid using large, empty boxes. Have students bring in food packages or models to place inside.

* See "Using This Guide," page 1.

Rate Your Plate

Comparing personal eating habits to the recommendations

Related Subjects and Skills

Identification, Classification, Recognition of group similarities and differences

Objectives

Students will:

1. Identify foods that belong to each food group.
2. Learn the serving sizes of foods in each food group of the USDA Food Guide Pyramid.
3. Compare their diet to the Food Guide Pyramid recommendations.

On the Web Site

Students are posed a series of questions about the Food Guide Pyramid, the number of servings recommended for each food group, and foods in each group. Students are also asked to determine the common characteristic of a list of foods. The last page of this section includes instructions for keeping a food diary and comparing it to the recommended number of servings of each food group as well as a chart with the recommended servings for different age groups. For more information about nutrition, see Appendix B -- Nutrition Information for Teachers -- and the USDA web site at www.nalusda.gov/fnic/fpyr/pyramid.html

Questions and correct answers from the web site (abbreviated here):

1. Can you pick the list that correctly names all 5 food groups and the number of servings in each?
C. Bread, Cereal, Rice, Pasta: 6-11 servings
Vegetables: 3-5 servings
Fruits: 2-4 servings
Meat, Poultry, Fish, Dry Beans and Peas, Eggs, and Nuts: 2-3 servings
Milk, Yogurt, Cheese: 2-3 serving
2. Why do growing kids like us need to eat a variety of good foods? A. So we can grow, think smart, and have energy to do fun things.
3. Choose the Bread, Cereal, Rice, Pasta group. A. tortilla, whole wheat bread, graham crackers.
4. Can you choose the Vegetables group? C. Spinach, Carrots, Sweet potatoes
5. Can you choose the Fruits group? B. Kiwifruit, Peach, Watermelon
6. Can you choose the Meat, Poultry, Fish, Dry Beans and Peas, Eggs, and Nuts group? B. Egg, Tofu, Dry Beans
7. Can you choose the Milk, Yogurt, Cheese group? A. Cottage Cheese, Skim Milk, Yogurt

8. doughnut, potato chips, cream cheese, mayonnaise, onion rings What do these foods have in common? B. They are high in fat
9. whole wheat bread, kale, hominy, black-eyed peas, corn tortilla What do these foods have in common? A. They are high in fiber.
10. tomato, cabbage, melon, turnip greens, plum, Butter Crunch lettuce What do these foods have in common? C. They all come from plants.
11. black beans, peanut butter, sesame seeds, tofu, lentils, eggs What do these foods have in common? B. They are plants in the Meat, Poultry, Fish, Dry Beans and Peas, Eggs, and Nuts.
12. Skim milk, non-fat yogurt, ice milk, Parmesan cheese What do these foods have in common? C. They are Milk, Yogurt, Cheese group choices that we should choose often

Suggested Classroom Activity Related to Rate Your Plate (1 of 2) Serving Sizes

Related Subjects and Skills

Math (fractions, measuring, and quantities)

Objectives

Students will:

1. Learn the serving sizes of foods in each food group of the USDA Food Guide Pyramid.
2. Learn fractions by using household measuring utensils and problem solving skills.

Materials

Worksheets can be found in Appendix A

1. Samples of foods from each category of the USDA Food Guide Pyramid (Bring enough for each student to eat some of the selections; use snacks or school lunch or breakfast if available.)

Some suggestions: raw vegetables cut into snack sizes, sliced whole grain bread, fruits, low-salt pretzels, rice, dry beans (pretend they are cooked), hard boiled egg, non-fat vanilla yogurt, milk, cheese, toasted sunflower seeds, cooked meat (may want to draw pictures or borrow food models from the school dietitian), breakfast cereal, whole grains, pre-made sandwich (students can take apart and measure the parts), pizza, others you think may be appropriate;

2. 2-3 sets of measuring cups (one per group of students);
3. 2-3 sets of measuring spoons;
4. 2-3 place settings (for the group to measure onto);
5. 1 food scale (ask the school dietitian for assistance locating);
6. Worksheet "Foods in the USDA Food Guide Pyramid - Practice Exercises";

7. Food lists from the Food Guide Pyramid Resource for Nutrition Educators, United States Department of Agriculture. (Find this at the USDA web site, www.nalusda.gov/fnic/Fpyr/pyramid.html)

Procedure

1. Begin this exercise with a review of the USDA Food Guide Pyramid, making note of the different number of servings and the range of servings recommended.
2. Divide students into two or three working groups. *
3. Pass out a list of foods and serving sizes as a reference. Also pass out the worksheet Foods in the USDA Food Guide Pyramid - Practice Exercises for students to record the foods they measure.
4. Instruct students to use measuring cups, measuring spoons, and a scale to demonstrate serving sizes. They can eat nearly all food items they measure as long as they follow safe food handling procedures. Do not allow students to eat Meat, Poultry, Fish and Eggs. Discourage them from eating uncooked Beans, Peas, and some Grains because these foods may hurt their teeth.
5. When students are ready, ask them to locate the Kids Food CyberClub web site and explore.

* See "Using This Guide" page 1

Suggested Classroom Activity Related to Rate Your Plate (2 of 2)

Comparing a one - day food diary to the recommendations.

This activity is difficult. We do not recommend using it with third graders.

Related Subjects and Skills

Math, Scientific process, Goal setting

Objectives

Students will:

1. Classify foods they ate into the food groups of the USDA Food Guide Pyramid.
2. Convert actual amounts of food eaten to serving sizes according to the USDA Food Guide Pyramid.
3. Relate the Scientific Process to food record and comparison activity.

Teacher Information

Please refer to Appendix B, Nutrition Information for Teachers, and the USDA web site, www.nalusda.gov/fnic/Fpyr/pyramid.html, for nutrition information to help you answer questions and lead the discussion. On the USDA web site you will find a guide for teaching the Food Guide Pyramid. It has information about why it looks the way it does, serving sizes, foods in each group, and menus that correspond to different

calorie levels. The guide can be downloaded and viewed using Adobe Acrobat software, also available through the site.

Materials

1. Worksheet "My Food Diary" (2 pages)
2. Worksheet "Antonio's Food Diary"
3. Worksheet "Rate Your Plate"
4. Worksheet "Setting Goals "
5. Poster or drawing of the USDA Food Guide Pyramid

Procedure

A few days before beginning this activity, hand out the worksheet set, "My Food Diary", and instruct students to keep a record of the food they eat the next day. They should start writing everything they eat or drink at midnight and continue until midnight. Students should write down the time they ate the food and how big it was or its weight. Whenever possible have them staple the food label to their worksheet.

1. Students should bring in their one day record that they were instructed to keep. Have the worksheet titled "Antonio's Food Diary" available for those who forget.*
2. Using the worksheet "Rate Your Plate," instruct students on how to convert the foods they ate to servings in food groups. Using a copy of the USDA Food Guide Pyramid, have students tally the number of servings they ate in each food group and compare those to the recommended number of servings for kids their age.
3. Have students decide whether they met or did not meet recommendations. Instruct them to choose three recommendations they did not meet. Use the "Setting Goals" worksheet to write changes they could make to meet those three recommendations.
4. Use the remainder of the session for students to explore the Kids Food CyberClub web site. Remind students to print a page from each section they visit to include in their folder.

* See "Using This Guide" page 1

Choices, choices, choices

Learning how to ask for healthy, low cost food items.

Related Subjects and Skills

Math, Consumer Science, Critical thinking / Decision making

Objectives

Game 1: The Cyber Food Shopper

Students will practice choosing foods that are low cost and get feedback about the nutritional quality of their choices.

Game 2: Winning Choices

Students will practice decision making by choosing how food and health scenarios should be played out.

Teacher Information

Nutrition interventions that help students learn what choices to make and help them gain the confidence and skills needed to actually make the choices are more successful at helping students eat foods that are good for their health.

Health behaviors generally do not have immediate consequences, so students have a more difficult time making the best choice. Teach students how to make decisions by teaching them to think about all of the consequences of the actions they might take. Students should also be taught that adults are supposed to help them make tough decisions especially about health behaviors.

On the Web Site

Game 1: Cyber Food Shopper

Students are asked to choose foods from three lists. Each list of foods is from a different type of market -- Super market, Farmers' Market and Corner Convenience Store. Students are allowed to spend no more than \$5.00, and four of their food choices must be healthy foods. They may select as many foods as they think they can purchase for \$5.00. When they submit their list the computer gives them feedback about their list and each of their choices.

Game 2: Winning Choices

Students read short descriptions of health related choices they need to help their friends make. They have 2 or 3 options to choose in response and gain or lose points based on the health outcome or consequence of the choices. Students start with 50 points and their final score is provided at the end, with feedback about how well they did and a suggestion that they try again if they did not reach a perfect score of 100.

The choices are

1. Bernice's breakfast: skip breakfast, take left over pizza from dinner and eat while she rides the bus, or eat school breakfast.

2. Hector's morning snack: eat Denny's chocolate candy or Luis' peanut butter and banana sandwich
3. Stephanie's lunch: eat everything or throw away the milk and green salad
4. Liz's money from her mother for books: save her money to buy the books or buy drugs
5. Bianca's choice at the corner store: sugar candy or yo-yo
6. Johnny finds his father's cigarettes: try smoking a cigarette or leave the cigarettes on the table
7. Wanda's choice from the refrigerator: soda pop or orange juice
8. Germaine's choice: go biking or watch television
9. Sammy's school lunch: peach or Jell-O
10. Mary Rose's snack after school: carrots or potato chips

Suggested Classroom Activity Related to the Cyber Food Shopper

Related Subjects and Skills

Math, Consumer Science, Critical thinking

Objectives

Students will:

1. Learn that different foods are available from different market sources.
2. Recall the Anytime, Sometimes, Sparingly food classifications;
3. Identify foods low in fat, cholesterol, sodium, and sugar, and high in fiber;
4. Develop a plan for achieving the nutrition goals they establish;
5. Practice choosing foods low in fat, cholesterol, and sodium and foods high in fiber;

Teacher Information

Please refer to Appendix B, Nutrition Information for Teachers, and the USDA web site, www.nalusda.gov/fnic/Fpyr/pyramid.html, for nutrition information to help you answer questions and lead the discussion. On the USDA web site, you will find a guide for teaching the Food Guide Pyramid. It has information about why it looks the way it does, serving sizes, foods in each group, and menus that correspond to different calorie levels. The guide can be downloaded and viewed using Adobe Acrobat software, also available through the site.

Materials

(Worksheets can be found in Appendix A)

1. Chalk board
2. USDA Food Guide Pyramid poster
3. Worksheet "Plan for Meeting Goals"
4. Mock grocery store game instructions, following the lesson plan
5. Empty food packages

6. Play money
7. Cash Register

Procedure

1. Discuss the Anytime, Sometimes, Sparingly concepts. Ask students to name foods they think go in each category and why they think it goes in that category.
2. Discuss the activity they did in "Comparing One - Day Food Record to the Recommendations" where they each wrote goals or changes they could make to meet the dietary recommendations of the Food Pyramid. Ask if any students were able to make any of the changes they wrote. Ask if any students even thought of the changes that they wrote since they wrote them.
3. Pass out the worksheet "Plan for Meeting Goals" and as a group, brainstorm ideas on how students could meet their goals. *
4. After suggestions are made, including the guidelines in the Teacher's Information section, pair or group students and instruct them to develop a plan for meeting their goals.
5. Set up a mock grocery store. See directions following the lesson plan. Have students switch roles at least once.
6. Direct students to the computer and instruct them to find the Kids Food CyberClub web site and explore it. They may want to use their worksheet from the first lesson to help them find the site. Be sure to have students print a page from the web site section(s) they visit to include in their folder.

* See "Using This Guide," page 1

Mock Grocery Store Game

Setting it up:

1. Set up the room with food aisles and a check-out aisle.
2. Place empty food packages and fresh food models (can be pictures or cut-outs) on the desks or tables that make the aisles.
3. Use paper or label stickers to create price markers. Fasten them on the shelf below each food item.
4. Be creative in making the cash register. You can try setting up a simple money tray and paper for addition.

Playing the Game:

1. Students should take turns being the consumer and the cashier.
2. Set a spending limit for each consumer.
3. Consumers must add the prices of the items they purchase as they shop to be sure they don't go over their limit.
4. Cashiers must correctly add the prices items purchased by the consumers.

5. Consumers pay for their items with the play money.
6. Cashiers accept the money and make change as necessary.

Other suggestions:

- Rewards for the students who purchase the most items within their spending limit.
- Simulate different types of markets: Supermarket, Grocery Stores, Convenience Stores, Farmers' Markets.
- Take field trips to different types of markets and compare them.

Suggested Classroom Activity Related to Winning Choices

Related Subjects and Skills

Health and Nutrition, Critical thinking / decision making

Objectives

Students will:

1. Learn that different choices lead to different consequences, both positive and negative.
2. Practice making health related choices,
3. Learn some of the specific consequences to health behaviors.

Teacher Information

This activity is designed to help students attain some critical thinking and decision making practice. As students learn this important skills, they will also learn about health behaviors and the consequences of those behaviors. Programs that focus on teaching these types of skills have been developed and used in classrooms around the country. If you feel your students will benefit from a more in depth approach please see the following resources:

Materials

This is a discussion and role-play activity; you do not need additional materials.

Procedure

Discuss the decision making process. How does a person decide what to do when faced with a situation? Ask students to respond.

The decision making process: 1. Decide what the situation is. 2. Think of the possible choices. 3. Think of the consequences of those choices. 4. Decide which consequence is best for you.

List of scenarios you can choose from to create role-plays:

1. Skipping meals. The consequences of skipping meals are lost energy, inability to process information in the classroom, and inability to pay attention.

2. Choosing a food to eat. Americans eat far too much fat and sugar and need to increase fruit and vegetable consumption. The consequences of choosing unhealthful foods too often are inability to concentrate (too much sugar), cavities (too much sugar), stunted growth, heart disease, obesity, diabetes, osteoporosis, and high blood pressure.
3. Smoking. Some consequences are lung and throat cancer, yellow teeth, and lost money.
4. Drugs. Some consequences are addiction and the ramifications of addiction, and lost money.
5. Exercise. Exercising leads to more energy, muscular development and bone development, and can help the body avoid diseases like diabetes and heart disease.
6. Ask students to help each other through the scenarios as each is role played.
7. List the problem, options, consequences, and decision.

Grow It Yourself

Instructions for growing plants, and information about local agriculture.

Related Subjects and Skills

Science, Social Studies

Objectives

Students will:

1. Follow the link to find the directions for growing plants indoors;
2. Follow the link to learn about food and the environment.

Teacher Information

Most plants have the same basic parts that function in the same way. From the ground up, the parts include:

Roots: Bring water and nutrients from the soil into the plant, offer stability.

(Tuber: An underground stem, stores food for the plant.)

Stems: Pathway from roots to leaves, storage of food for the plant, structure.

Leaves: Use photosynthesis to turn sunlight into energy for food.

Flowers: Reproduction of the plant, when pollinated it will produce seeds.

Fruits: Protect the seeds.

Seeds: Plant embryo waiting for the right conditions to germinate.

Some common foods classified according to their plant part:

Roots: Carrot, sweet potato, beet, turnip, and radish

Tuber: Potatoes

Stems: Celery, broccoli stalks, and asparagus

Leaves: Lettuce, Collard Greens, Spinach, and Basil

Flowers: Broccoli Crowns, Nasturtium

Fruits: Apples, Peppers, and Tomatoes

Seeds: Wheat flour (ground wheat seeds), Oats, Corn, Peas

Look in elementary or middle school science texts for more information about plants.

On the Web site

Students are encouraged to follow the two links, "Garden Center" and "My food choices can help the earth be healthy". In the Garden Center, students can print easy directions for starting their own indoor garden. From the Garden Center, students can also find a list of books that are recommended for more information about gardening. The section "My food choices can help the earth be healthy" is a series of questions for the students to answer about the importance of local agriculture and sustainable

farming practices. From the last question, students follow a link called "What Can I DO???" to learn three easy ways they can help the earth through their food choices.

Correct answers to questions in *My Food Choices Can Help The Earth Be Healthy*

1. Are plant foods also good for the earth? Yes
2. False. Putting chemicals on our food when it is growing doesn't matter to us. Those chemicals don't harm the earth or us.
3. False. There is no way to eat foods that don't have chemicals on them so don't bother.
4. True. In our country we are using up all of the top soil that we need to grow food by putting lots of chemicals in it and letting cows eat all of the grass that holds it down.
5. False. It doesn't matter where our food comes from because we have planes and trucks to get it from anywhere in the world.
6. True. If we buy food from local farmers who don't use a lot of chemicals we will help them stay in business.
7. True. Foods that are grown near us have more vitamins than foods grown far away and brought to us by trucks and planes.

Suggested Classroom Activity Related to Grow It Yourself

Related Subjects

Science

Objectives

Students will:

1. Learn basic plant anatomy and general function;
2. Learn the plant part origin of some common foods;
3. Demonstrate knowledge by completing the worksheet "The Parts of a Plant".

Materials

(Worksheets can be found in Appendix A)

1. Worksheet "The Parts of a Plant"
2. Chalk board, chalk
3. Newspaper or drop cloth
4. Paper cup, one for each student
5. Seeds
6. Soilless potting mix (enough to fill a paper cup for each student)

Procedure

Before class, set up a seed planting area with newspaper on the floor and all of the supplies to plant.

1. Begin the lesson by asking students where plants come from. Draw a generic plant starting with the roots (see diagram) and ask students to name the parts. As they name a part, also ask them what they think its job is inside the plant.
2. Ask students if they can think of any foods that are roots. List those on the diagram near the roots. Continue with each plant part. *
3. If students have not already found and printed the directions, direct them to find the Grow It Yourself section of the Kids Food CyberClub web site and print the direction for growing plants indoors. Demonstrate seed planting. Allow students to plant a seed in their paper cup to take home or to grow in the classroom if conditions permit. Ask a student to read the instruction from the web site and allow them to determine if they should take their plants home or keep them in the classroom to grow.
4. Pass out the worksheet "Parts of a Plant" and have students complete it in their spare time or as homework. They may want to use the Chalkboard diagram as a model.
5. Direct students to the computer and instruct them to explore the Kids Food CyberClub web site. Be sure to have students print a page from the web site section(s) they visit to include in their folder.

* See "Using This Guide," page 1

Books I Love to Read

Reading list of food related books and book review format.

Related Subject and Skills

Language Arts

Objectives

Students will:

1. Read books from the reading list below (also on the site) or others with food as a prominent theme
2. Write a review of the book
3. Submit the review for posting on the web site

On the Web Site

Students are offered a list of suggested books they can read with food themes. They can follow a link to submit their book review and/or follow a link to other sites with book reviews.

Book list from the web site:

Blueberries for Sal. Robert McCloskey, The Viking Press, 1948.

This is a story about Sal and his adventures blueberry picking in Maine.

Blue Potatoes, Orange Tomatoes. Rosalind Creasy.

Learn about out of the ordinary fruits and vegetables.

Bread and Jam for Francis. Russel Hoben, Harper and Row, 1964.

Cloudy with a Chance of Meatballs. Judi Barrett, Atheneum, 1978.

Life is delicious in the town of Chew & Swallow, where it rains soup and juice and snows mashed potatoes.

Chicken Soup with Rice - A Book of Months. Maurice Sendak, Harper & Row, 1962

Leo the Lettuce Lion and His Vegetable Kingdom. Don Wolf, The Steinbeck Country General Store, Inc., 1978

Mr. Putter and Tabby Pick the Pears. Cynthia Rylant, Harcourt Brace.

An old man and his cat are too creaky to climb ladders, but still find a solution to enjoy pear jelly.

Nibble, Nibble, Jenny Archer. Ellen Crawford, Little, Brown, and Company, 1993.

Jenny Archer is excited about her chance to be in a television commercial.

Pizzas & Punk Potatoes. Arielle Rosin.

Stone Soup. Marcia Brown, Charles Scribner's Sons, 1974.

Want to learn how to make soup out of a stone? This book is for you!

Sweet Corn. James Stevenson, Greenwillow.

Celebrate summer fun with twenty-eight short poems, brought to life by creative designs that stretch, twist, and accent the text.

Suggested Classroom Activity Related to Books I Love to Read

Related Subject and Skills

Language Arts

Objectives

Students will:

1. Read books from the reading list or others with food as a prominent theme;
2. Write a review of the book;
3. Submit the review for posting on the web site.

Materials

1. Books from the reading list or access to a library containing these books;
2. Additional books with food themes;
3. Book Review Format Guide.

Procedure

We suggest using this activity at times when students need a break from the computer or are waiting to use the computer or when other lesson activities have been completed.

1. Use the Book Review Format Guide in Appendix A, or your own Book Review Format as a model for students to write their reviews. Rather than make copies of the guide for each student, make one copy, laminate it, and keep it on file where students can consult it as needed.
2. If students have never written a Book Review, explain the procedure. Explain and demonstrate, if necessary, how to enter the review on the form of the Books I Love to Read section of the Kids Food CyberClub web site.
3. We encourage rewards for students who complete several reviews. If you will use a reward system, explain it to the students.
4. Reviews submitted to the Kids Food CyberClub will be posted on the web site.

Other Activity Suggestions

Ask students to search for articles in newspapers and magazines that relate to food and health. Use these articles to complete the activity. Ask students to present their articles for a current events discussion.

Your Recipes, Please

Send recipes to the Kids Food CyberClub for posting on the web site.

Related Subjects and Skills

Language Arts, Math

Objectives

Students will:

1. Find or create a recipe
2. Use recipe writing format to submit their recipe for posting on the web site

On the Web Site

Students are instructed to find a recipe they have tasted and like. A recipe format guide and instructions are given on the site. Student types his/her name and school and the recipe. When it is submitted using the online form, the recipe is sent to the Kids Food CyberClub, where it will be posted on the site within a few weeks. The student's name and grade will be posted to the site along with the recipe submitted.

Suggested Classroom Activity Related to Your Recipes, Please

Related Subjects & Skills

Math problem solving, fractions, writing, following directions

Objectives

Students will:

1. Cooperate to make a recipe for a class snack;
2. Use problem solving skills with fractions to measure the ingredients for the recipe;
3. Use math problem solving skills to convert the recipe to family-sized portions;
4. Re-write the recipe for their class snack.

Materials

1. Recipe in Appendix A (ingredients and materials listed on the recipe)
2. Worksheet "Recipe Conversion"

Procedure

Before class, purchase the ingredients for the recipe and gather the utensils.

1. Follow directions on the recipe for creating the class snack. The recipe serves 25*.
Whenever possible use a smaller sized measuring utensil and ask the students to calculate how many of the smaller measures are needed to reach the size called for in the recipe.
2. Pose the problem of using the recipe, which serves 25, for their family, which in this case has 5 people. After discussion about possible solutions, instruct students to change the recipe to serve 5 people by dividing the fractions.

* See "Using This Guide," page 1.

Other Recipe Suggestions

Try these recipes in place of the Fruit Yogurt Parfait recipe used in this lesson plan.

- Dip fresh Fruits and Vegetables in a low fat yogurt or sour cream dip
- Make a frozen fruit, juice, and yogurt blender drink
- Peanut butter and banana sandwiches on whole wheat bread
- Celery with peanut butter and raisins
- Make "soda" with seltzer and juice

Hunger In Our Land

Hunger affects every region of our country. What can we do to help?

Related Subjects

Social Studies, Civics, Language Arts

Objectives

Students will:

1. Learn simple concepts related to domestic hunger;
2. Express what they have learned to a public official via the Internet;
3. Use email software to transmit messages via the Internet.

Teacher Information

Hunger and malnutrition affect many more of our students than we know about. Because the symptoms of hunger or malnutrition are very subtle or can be confused with other social or psychological problems that children may face, these easily treated problems often go unchecked. It is well known that hungry children do not learn as well or attend as many school days as well nourished children. Starting the day right with a good breakfast and continuing with snacks and lunch are the keys to creating tomorrow's leaders.

School meals, Summer Food Service Programs, Food Stamps, and emergency meals are all programs that help students meet their daily food requirements. Students can easily become involved in expressing their views about hunger via the Internet. Using the information they learn at the Kids Food CyberClub about nutrition and the importance of good food choices, they can send a message to their congressional leaders about doing something for hungry kids.

On the Web Site

Students will answer a series of true - false questions about domestic hunger and its causes. Choosing the correct answer leads the student to the next question. An incorrect answer leads the student back to the question to choose again. If they choose to follow the link for more information about how they can participate in ending hunger they will be prompted to send an email message to President Clinton or a letter to their Governor. Students are also encouraged to discuss this section with an adult. We encourage you to email a copy of the letters so that we can post them to our site.

Correct answers to True/False questions on the web site:

1. True. Hunger happens when people do not have enough food to eat.
2. False. Only people in Africa are hungry. There is not enough water there to grow food for them.
3. False. People who have a job and earn money are not hungry.
4. True. Kids who do not eat breakfast do not learn as much in school as kids who do eat breakfast.

Suggested Classroom Activity Related to Hunger in Our Land

Related Subjects

Social Studies, Civics, Language Arts

Objectives

Students will:

1. Discuss the concept of hunger and their thoughts and feelings related to its existence around them.
2. Express their thoughts and feelings through letter writing, drawing, or a class project.

Materials

1. Statistics about hunger in your area. For example, how many people use emergency meal sites, or food stamps. Contact your area food bank or hunger advocacy organization for specific information. In Connecticut, contact the Connecticut Association for Human Services at (860) 951-2212.
2. Letter writing materials or drawing materials depending on the medium of expression you choose for your class.
3. Consult the Hunger section of the Kids Food CyberClub web site for discussion prompts. Ask the same questions to your area hunger advocacy agency to get more information for an in-depth discussion.

Procedure

1. Discuss hunger with your class using the questions from the Kids Food CyberClub as prompts. Include information from your area hunger advocacy agency to embellish the discussion.
2. Give students opportunity to discuss how they feel about hunger around them and throughout the world.
3. Offer them options for taking action to reduce hunger. Some activities your class might want to participate in related to hunger include:
 - a. Writing a letter or sending email to a government official such as President Clinton, your state governor, a legislator, or a city official. Encourage students to ask questions of the legislators and express their opinions about hunger.
 - b. Organize a class or school food drive.
 - c. Get statistics from your school about the number of kids that use food assistance programs in your school. (Show them how close hunger is.)
 - d. Invite speakers to your class or school from the food bank or hunger advocacy group to talk about hunger in your area.

Your Ad Here

Food advertising affects our food choices.

Related Subjects and Skills

Art, Social Science, Consumer Science

Objective

Students will learn how to create a food advertisement for a healthy food and hang it up in the school.

Teacher Information

Food companies spend billions of dollars each year on advertising to entice us to purchase their products. The power of suggestion by these companies can be very influential. This section of the site and the activities help students understand the purpose of advertising (i.e., increasing sales and profits for the food companies).

Some of the marketing strategies used include:

1. Celebrity endorsements
2. Logos or slogans
3. Health claims or social status claims

On the Web Site

Students are posed some questions to get them thinking about media and advertising. Suggestions are given for how to create a food advertisement and who to ask to hang it up in the school.

Suggested Classroom Activity Related to Your Ad Here

Related Subjects and Skills

Social Science, Consumer Science

Objectives

Students will:

1. Recognize the role of food companies in advertising and the influence of advertising on food choices
2. Create advertisements for healthy foods

Materials

1. Heavy Paper
2. Magazines with lots of food pictures
3. Glue
4. Markers, colored pencils, or similar

Procedure

1. Introduce the concept of food advertising. Ask students if they watch television, a read magazine, newspapers, billboards, and listen to the radio. Have they heard, seen, or read any commercials? Can they describe any to the rest of the class? As some students describe the ads they have seen, ask other students if they also recall the ad. Ask if any of the ads they recall are for foods. Ask who students think make advertisements. Ask why food companies would make advertisements. Ask if food companies are only concerned about our health? Ask what else they might be concerned about. Ask if we should believe everything we are told in food ads. Ask why or why not. Ask what strategies are used to create the ads and what characteristics they have in common.
2. Divide students into computer groups. For steps three to five, some students can work on healthy food advertisements while others work on the web site or all students can work on the web site after they create their advertisement.
3. Direct students to find the Advertising section of the Kids Food CyberClub web site and print the directions for creating a food advertisement.
4. Follow the directions from the web site to create a food advertisement for a healthy food. Suggest that students choose a fruit or vegetable, whole grain product, low fat milk or yogurt, dry beans or peas, or a lean meat.
5. Get permission from the food service manager for your school to hang students' advertisements up in the cafeteria or get permission from the principal to place advertisements around the school.
6. Allow students to work on the Kids Food CyberClub web site for the remainder of the time.

Food Facts

A small database of foods and their nutritional content

Related Subjects and Skills

Health and Nutrition, Math, Consumer Science

Objective

Students will find nutrition information about foods they like to eat.

Teacher Information

The Food Facts section has information very similar to the Nutrition Facts food label that you will find on most foods in the United States. Learning to use this information will help students choose foods for better health. For more information about the Nutrition Facts food label see the Food and Drug Administration web site at: www.fda.gov. Look for "Foods" and the topic Food Label.

On the Web Site

Students choose which food group they want to view. A list of possible foods to view in the chosen food group is shown. Students then choose the specific food and are shown the food facts chart:

Brown Rice

Serving size: 1/2 cup cooked

Amount per Serving

Calories 110 Calories from Fat 9

Total Fat 0.9g

Total Carbohydrates 22.9g

Dietary Fiber 1.5g

Total Protein 2.25g

Vitamin A none

Vitamin B high

Vitamin C none

Calcium low

Iron low

Brown rice is a good food choice because it has more fiber than white rice.

The factory puts vitamins and minerals on white rice that were taken away when it was turned from brown to white.

Suggested Classroom Activity Related to Food Facts

Related Subjects and Skills

Health and Nutrition, Math, Consumer Science

Objectives

Students will:

1. Learn the nutritional value of foods by reading Food Facts charts on the web site.
2. Determine the percentage of calories from fat, carbohydrate, and protein in the foods they find on the web site.

Materials

1. Food Facts charts for two or more foods. (from the web site)
2. Pencil
3. Paper

Procedure

1. Show students the food facts tables. Allow them to choose two or more food facts tables to work with during the exercise.
2. Review the parts of the table and what each bit of information tells about the food.
Serving size = the quantity of food that counts as one serving in the Food Guide Pyramid
Amount per serving = the amount of each nutrient in one serving. The serving size is listed on the second line of the table.
Calories = the total calories in one serving from all the nutrients.
Calories from fat = total calories in one serving from just fat. This number is one fraction of the total calories. Subtracting this from Calories will leave the calories from all other nutrients.
Total fat = the grams of fat in one serving. This number multiplied by 9 calories per gram should equal the number of calories from fat listed above.
Total carbohydrate = the grams of carbohydrate in one serving. This number multiplied by 4 calories per gram will equal the number of calories from carbohydrate in one serving.
Dietary fiber = the grams of dietary fiber in one serving.
Total protein = the grams of protein in one serving. This number multiplied by 4 calories per gram will equal the number of calories from protein in one serving.
Vitamin A, Vitamin C, Calcium and Iron have a low medium or high rating. This rating is based on the % of the USRDA for children found in one serving of the food. Low = 0 to 4.95, Medium = 5 to 9.9%, High = 10% or more
3. Each of these nutrients is included because the quantities of these nutrients in our diet determine how healthful our diet is. For example, less than 30% of the calories in our diet should be from fat. Each food we choose does not have to have less than 30% of calories from fat, but on average our diet should. Knowing how many grams of fat are in each food, one can add up total fat grams for the day and figure the percentage of daily calories from fat.
4. Show students how to perform percentage calculations using this example:

Find the total calories per serving of the food.

Brown Rice 110 Calories per ½ cup serving

Find the grams of carbohydrate (or fat or protein) per serving.

22.9 grams of carbohydrate

Multiply the grams of carbohydrate by 4 calories per gram, (fat by 9 calories per gram), (protein by 4 calories per gram) to give the number of calories supplied by that nutrient.

$22.9 \text{ g} \times 4 \text{ calories/gram} = 91.6 \text{ calories from carbohydrate}$

Divide the number of calories supplied by carbohydrate (or fat or protein) by the total calories per serving of food.

$91.6 \text{ calories} \div 110 \text{ calories} = 0.8327$

Multiply that decimal by 100 to give the percentage of calories supplied by that nutrient.

$0.8327 \times 100 = 83.27$

The goal is to have calories from carbohydrate >50%, calories from fat <30%, and calories from protein 15 to 20%. Each food item is not going to supply that ratio of nutrients but over the course of the day the foods should average out to that ratio.

5. Percentage calculations can be figured for each nutrient of a food. The percentages should add up to 100 for all nutrients. Calories do not come from other sources.
6. After students figure the percentages, ask them to compare two different foods to determine which one more closely meets the recommendations for percentage of calories from fat. Then ask them to determine which might be a better food choice. For example, a food that is low in fat but has a high percentage of carbohydrates as sugar or more calories might not be a better choice than a food with fiber, complex carbohydrates, and more fat. This is a subjective analysis, but will help students in choosing foods on their own later.
7. Have students alternate between calculating percentages and using the web site.

Question of the Month

Students are asked to respond to a health question.

Related Subjects and Skills

Health and Nutrition, Language Arts

Objective

Students will respond via the web site to a health question.

On the Web Site

Students will be asked a different question each month about a health topic. Answers can be submitted using the form on the web page. At the end of each month student responses will be posted to the site for everyone to read.

Suggested Classroom Activity Related to Question of the Month

Related Subjects and Skills

Health and Nutrition, Language Arts

Objectives

Students will:

1. Discuss a health question and related issues.
2. Learn how to debate, express their views, and respect the views of others.

Materials

1. Large writing area, crayon or marker

Procedure

1. Read the Question of the Month from the web site.
2. Discuss or debate the topic as a class. This is an opportunity to teach debate or to teach consensus.
3. Students can submit their responses to the Kids Food Cyber Club as a class or as individuals.
4. Encourage students to express opposing views while respecting others' freedom to speak.
5. Submit response(s) for posting on the web site.
6. View your response the following month.

Tell us what you think about our site!

We encourage students to give us feedback about what they see and want to see on the Kids Food CyberClub web site. The form is easy and very similar to the others they have used in the other sections of the web site. Their name and email address are requested so we can respond to their suggestions and get to know who is using the site.

There are similar forms in the Teachers' and Parents'. Please tell us what you think about Kids Food CyberClub and about this Teacher's Guide. What did you like about them and what could be improved?

More cool web links for kids

This section has other fun and educational web sites that we think students will enjoy and learn from. These web sites are related to the topics and skills covered in the CyberClub site. There are similar links sections in the Teachers' and Parents' sections.

APPENDIX A

WORKSHEETS FOR CLASSROOM ACTIVITIES

- 1. COMPUTER WORDS AND ACTIONS**
- 2. USING A SEARCH ENGINE TO FIND SITES ON THE WORLD WIDE WEB**
- 3. MY FOOD GUIDE PYRAMID**
- 4. PLANT FOODS**
- 5. ANIMAL FOODS**
- 6. FOODS IN THE USDA FOOD GUIDE PYRAMID - PRACTICE EXERCISES**
- 7. MY FOOD DIARY (SET OF 2 PAGES)**
- 8. ANTONIO'S FOOD DIARY (A COMPLETED FOOD DIARY)**
- 9. RATE YOUR PLATE**
- 10. SETTING GOALS**
- 11. PLAN FOR MEETING MY GOALS**
- 12. THE PARTS OF A PLANT**
- 13. BOOK REVIEW FORMAT GUIDE**
- 14. RECIPE: FRUIT YOGURT PARFAIT**
- 15. RECIPE CONVERSION WORKSHEET**

Computer Words and Actions

In the spaces provided, write, or define some common computer words and actions. If the word is written you have to define it. If the definition is written you have to write the word.

When you are finished and working on the computer, place a check-mark next to the words or actions you see as you see them. **Do not** download any documents from the World Wide Web to your computer.

WRITE IT

DEFINE IT

_____ The machine that processes data and information (You can play really neat games and surf the Internet on it too!)

_____ The machine that makes a paper copy of what you see on your screen.

Internet

Software

World Wide Web

Web site address

Search Engine

_____ Words that describe a web site or the type of information you are looking for on a web site. Used with a search engine.

_____ Taking a file from the Internet and saving it on your computer. (Do not do this at school!)

_____ Do this to save the address of a web site you really like so you can go back to it again without needing to write down the URL.

Hyper links

**Using a Search Engine to find a page
on the World Wide Web.**

1. Your job is to find a web site about kids and hunger called "KIDS Can Make A Difference". The Kids Can Make A Difference program is part of the organization called World Hunger Year.
2. Use keywords to help you find the site. Keywords can be the name of the site, the people who make the site or topics in the site.
3. Write all of the keywords that might help you find the "KIDS Can Make A Difference" web site.

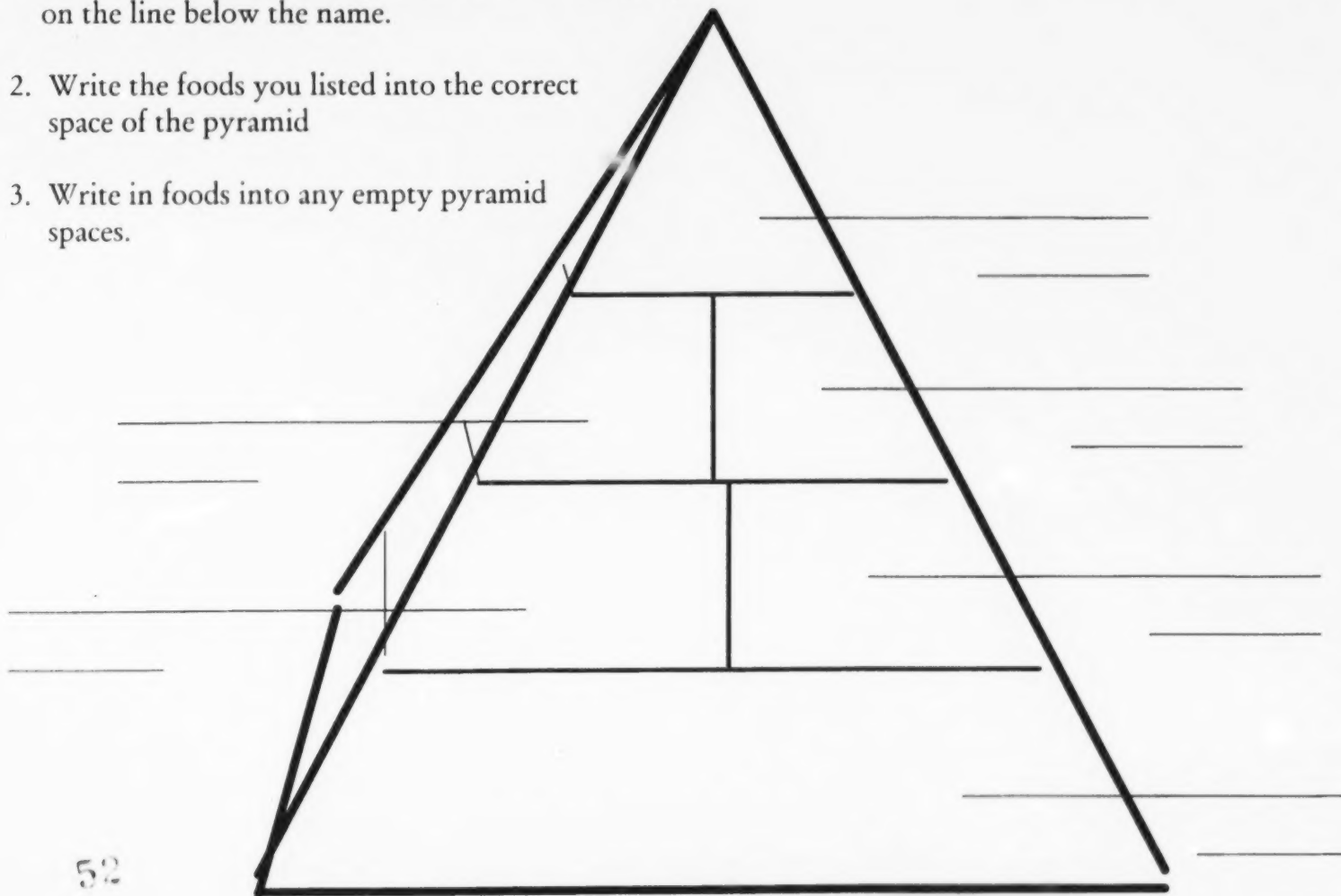
4. Turn on the computer and start the Web Browser software. Have your teacher help you connect to the internet.
5. Go to the Yahoo! search engine , by typing the web site address www.yahoo.com in the Location box of the web browser.
6. Start by typing in the gray box one keyword you wrote in #3. How many category and site matches did you get?
Write the key word and the number of matches here. _____
7. In the first 25 matches do you see the "KIDS Can Make A Difference" web site? _____
8. Try other keywords and see what happens.
9. Did you find the "KIDS Can Make A Difference" web site?

10. Now type "KIDS Can Make A Difference". Do you see the site? Click on the underlined words and go there.

MY FOOD GUIDE PYRAMID

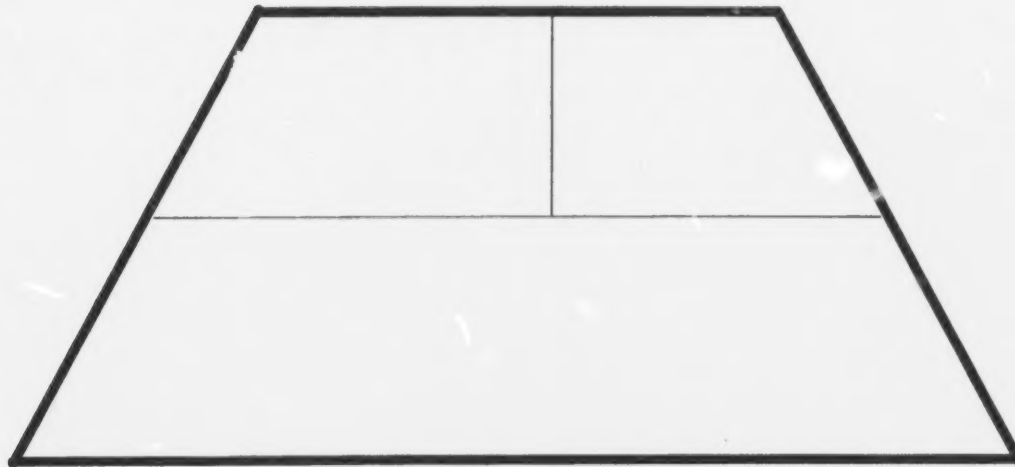
(USDA)

1. Write the name of each food group on the line next to it and the number of servings we should eat every day on the line below the name.
2. Write the foods you listed into the correct space of the pyramid
3. Write in foods into any empty pyramid spaces.



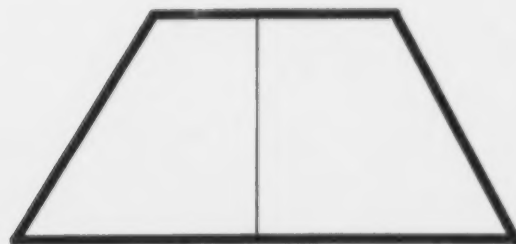
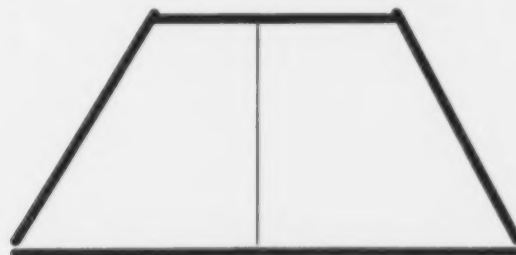
PLANT FOODS

Copy these diagrams onto colored paper for students to cut out and tape to their worksheet "My Food Guide Pyramid"



ANIMAL FOODS

Copy these diagrams onto colored paper for students to cut out and tape to their worksheet "My Food Guide Pyramid"



Foods in the USDA Food Guide Pyramid Practice Exercises

1. Write the food groups and the number of servings we should eat every day.

FOOD GROUP	NUMBER OF SERVINGS EACH DAY
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. Now, write the names of foods you measure and weigh, the food group each belongs to, and how big each serving is.

FOOD	FOOD GROUP	SERVING SIZE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

My Food Diary

Directions

1. Write down everything you EAT and DRINK for the whole day. Don't forget drinks, snacks and candy!
2. Write how much you eat and drink. Some food packages tell you the weight and number of servings. Staple any food packages you can to the worksheet and bring them to class.
3. If you eat something like a sandwich with many combined foods, write each food on a line and write the amount of each separately.

Name _____

Date _____

TIME OF DAY	FOOD OR DRINK	AMOUNT
Example: 6:30 am	orange juice Oatmeal milk (on my cereal) raisins (on my cereal)	8 ounces ¼ cup ½ cup 1 cup

Name _____

Date _____

PAGE 2

TIME OF DAY	FOOD OR DRINK	AMOUNT
Example: 6:30 am	orange juice Oatmeal milk (on my cereal) raisins (on my cereal)	8 ounces ¼ cup ½ cup 1 cup

My Food Diary by Antonio

Directions

1. Write down everything you EAT and DRINK for the whole day. Don't forget drinks, snacks and candy!
2. Write how much you eat and drink. Some food packages tell you the weight and number of servings. Staple any food packages you can to the worksheet and bring them to class.
3. If you eat something like a sandwich with many combined write each food on a line and write the amount of each separately.

Name Antonio

Date March 25, 1997 Tuesday

TIME OF DAY	FOOD OR DRINK	AMOUNT
Example: 6:30 am	orange juice oatmeal milk (on my cereal) raisins (on my cereal)	8 ounces ¼ cup ½ cup 1 cup
8:45	Cereal	1 bowl
	2% Milk (on my cereal)	1 carton
	Apple juice	1 small carton
12:15	Peanut Butter Sandwich :	
	Whole wheat Bread	2 slices
	Peanut Butter (I asked Mr. Velasquez)	2 Tbsp
	Strawberry jelly (I asked Mr. Velasquez)	1 Tbsp

Name AntonioDate March 25, 1997 Tuesday

PAGE 2

TIME OF DAY	FOOD OR DRINK	AMOUNT
Example: 6:30 am	orange juice Oatmeal milk (on my cereal) raisins (on my cereal)	8 ounces ¼ cup ½ cup 1 cup
3:30	Apple	1 medium
	Pretzels, Mr. Chips brand low fat	10 ounce bag
	Baby Carrots	10 small
5:30	Rice and Beans (I measured with my Mom's measuring cup)	2 cups
	Green Salad (I measured with my Mom's measuring cup) Romaine lettuce	1 cup
	Tomatoes	½ cup
	mushrooms	a few pieces
	chicken my Mom cooked in the oven. I ate the skin.	1 leg and 1 breast
7:45	Banana and milk in a blender Banana	1 medium
	2 % Milk	1 cup

RATE YOUR PLATE

Directions

Fill in the columns of the worksheet to figure out how many servings you ate of each food on your food diary.

1. Write in the foods you ate from your food diary;
2. Write the amount you ate of each food from your food diary;
3. Write the name of the food group of the USDA food guide pyramid it belongs to;
4. Write the standard serving size of the food from the reference list;
5. Calculate the number of servings you ate by dividing the amount you ate by the standard serving size. Don't forget to convert the units so they match before you divide.

FOOD	Amount I Ate	FOOD GROUP	1 Serving Equals	Number of Servings I Ate

Setting Goals

Directions

1. The Food Guide Pyramid shows us what our diet should be like so we will be healthy, feel great, and grow strong. Read the list of things the Food Guide Pyramid shows us.
2. When you finish put a check mark next to each one that you know you follow everyday.
3. Circle the ones that you do not follow everyday.
4. Read the ones you have circled one more time. Choose 3 of them that you would like to try and do everyday. On the lines below write one thing you could change in what you eat to do what the Food Guide Pyramid is tells us we should do.

The Food Guide Pyramid tells us we should

1. **Eat a variety of foods.** That means different foods from all of the food groups.
2. **Eat the right amount of the foods you choose.** That means eat the recommended number of servings in the right serving size for a person your age and size.
3. **Use moderation in choosing your foods.** That means you should balance your food, exercise. Choose foods that are low in fat and sugar, as well as foods that are high in fiber and complex carbohydrates.
4. Eat 6-11 servings of Grains
5. Eat 3-5 servings of Vegetables
6. Eat 2-4 servings of Fruits
7. Eat 2-3 servings of Meats
8. Eat 2-3 servings of Milk

Ways I can change to eat the Food Guide Pyramid way.

Write three changes you want to make to your diet to help you stay healthy.

1. _____
2. _____
3. _____

Plan for Meeting My Goals

Copy your goals from the worksheet "Setting Goals"

1. _____

2. _____

2. _____

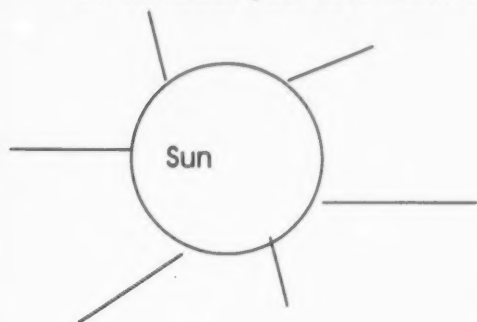
Using suggestions from the class discussion and your group, write steps you could take to meet at least one of your goals.

To meet my goal 1, 2, or 3 I will do the following:

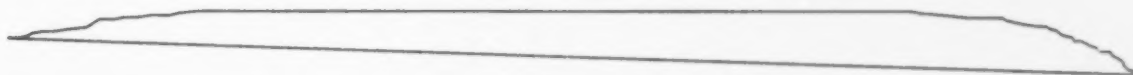
The Parts of a Plant

Directions

1. Draw a food plant in the space below and label its parts. (Hint: Seeds, Roots, Stem, Leaves, Flower, Fruit)
2. List foods you have eaten next to the plant part they come from.



Earth



Books I Love to Read

Format Guide

Your Name _____ Date _____

Book Title _____

Author _____

Your Review

1. Describe the plot of the story. What happened?

2. Explain what you liked or did not like about the book.

Fruit and Yogurt Parfait

This colorful layered dish can be eaten as a dessert, as a snack or as part of breakfast.

Serves 25

Ingredients

- 12 ½ cups Vanilla flavored low-fat Yogurt
- 2 small Cantaloupe or Honeydew melons
- 8 to 10 medium Apples
or 10 to 12 medium Pears
- 2 to 3 lemons (to keep apples or pears from browning)
- 8 to 10 medium Peaches
or 8 to 10 medium Nectarines
- 6 to 7 cups fresh or frozen, thawed Berries (Blueberry, Raspberry, Strawberry)
- 1 pound Raisins

Materials

- 25 Parfait dishes (or clear glass or plastic cups)
- 25 Spoons
- 1 Sharp knife
- 1 Cutting board
- 6 Serving bowls (one for each fruit ingredient)
- 7 Serving spoons
- 2 or 3 Melon ballers

Directions

Preparing the fruit

1. If using frozen berries, remove them from the freezer, place in a serving dish and allow to thaw.
2. Cut the melons in half and scoop out the seeds.
3. Use the melon baller to scoop melon balls from each half of the melon. Place melon balls in a serving dish and set aside.
4. Wash all fruit that will be eaten with the peel.
5. With the peel on, cut the apples (or pears) into bite sized chunks. Place chunks in a serving dish and squeeze lemon juice over them. Stir to be sure all chunks have been covered. Set the dish aside.
6. With the peel on, cut the peaches (or nectarines) into bite sized chunks. Place chunks in a serving dish and set aside.
7. If using fresh berries, sort through them gently to find any undesirable ones. Place in a serving dish and set aside.

Assembling the Parfaits

1. Layer the fruit and yogurt in each dish. Try starting at the bottom with the melon, then the apple, some yogurt, the berries, more yogurt, then the peaches.

Recipe Conversion Worksheet

Follow the steps below to convert the Fruit and Yogurt Parfait recipe ingredient amounts from 25 servings 5 servings

1. The Fruit and Yogurt Parfait recipe makes enough for 25 people. You want the recipe for your home that only makes enough to serve 5 people. What math function will you need to use to change 25 to 5?
2. What number will you divide 25 by to equal 5? (What number multiplied by 5 will equal 25?)
3. Divide each ingredient amount by the number you wrote in question 2.

Ingredients to serve 25 people:

12 ½ cups Vanilla flavored low-fat Yogurt
2 small Cantaloupe or Honeydew melons
10 medium Apples
2 lemons (to keep apples or pears from browning)
8 medium Peaches
6 cups fresh or frozen, thawed Berries (Blueberry, Raspberry, Strawberry)
1 pound Raisins

Ingredient amount	Divide by	New Ingredient amount
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____

APPENDIX B

NUTRITION INFORMATION FOR TEACHERS

Nutrition Information for Teachers

Getting the Information You Need

In addition to the information provided here, look on the United States Department of Agriculture web page: www.nal.usda.gov/fnic/fpyr/pyramid.html. On the USDA web site you will find a guide for teaching the Food Guide Pyramid. The guide has information about the food groups of the pyramid, foods in each group, serving sizes, and menus that correspond to different calorie levels. You will be able to view information (as Web pages) or download it (in Acrobat "PDF" format).

That information and this brief review will help you answer the majority of your students' questions. If you would like more information, you can email us via the Kids Food CyberClub web site. Alternatively, your school or school district probably employs a dietitian or nutritionist who will be a helpful resource.

Nutrition for good health

According to national data, the current American diet is far too high in fat, saturated fat and cholesterol, and too low in fiber and complex carbohydrates. Based on that data and other scientific information about nutrition and health, the government has established the Dietary Guidelines for Americans. Our eating habits are contributing to many chronic and costly diseases like Heart Disease, Cancer, Diabetes, and High Blood Pressure.

It is well documented that malnutrition in children, including dietary imbalance as well as inadequate quantity, inhibits optimal growth and development. Health promoting or health damaging eating behaviors are learned in childhood from a variety of environmental influences.

Nutrition education programs that teach children wise food choices and offer them the opportunity to practice these wise food choices help establish health promoting eating behaviors. Students also need role models and a supportive environment to help them make the behaviors into habits. Involving parents in your school activities whenever possible will help you achieve that goal.

The Food Groups and number of servings per day

Bread, Cereal, Rice, and Pasta	6-11
Vegetables	3-5
Fruits	2-4
Meat, Poultry, Fish, Dry Beans and Peas, Eggs, Nuts, and Seeds	2-4
Milk, Yogurt, and Cheese	2-3
Fats, Oils, and Sweets	Use these foods only in moderation.

Keywords

Nutrients - The basic materials from which the body is made and regulated. They must be ingested in sufficient quantity to meet the body's needs. (Christian & Greger, 1988)

Water - The body is comprised mostly of water, approximately 60% by weight.

Getting adequate amounts into the system is essential. Dehydration, even mild, can affect mental capabilities. Symptoms include sleepiness, apathy, loss of concentration, as well as decreased physical performance.

Drinks that contain high amounts of sugar and /or caffeine do not adequately hydrate. The sugar will draw water out of cells (osmosis) and caffeine acts as a diuretic. Plain water or diluted fruit juices (not sugary fruit flavored drinks) are the best sources of water. Vegetables and fruits have relatively more water than other foods.

Carbohydrate - Sugar, starch, and fiber are carbohydrates.

Sugar and starch provide energy. Fiber provides bulk in the intestines. Fiber is often listed separate from other carbohydrates. The difference is that fiber is indigestible even though it has a similar molecular structure to other carbohydrates. Since protein also provides energy, carbohydrates can spare proteins to be used for other body functions. See "More about Proteins" below.

Protein - Made of amino acids, these molecules have structural, regulatory, and energy providing capabilities. Proteins are found in most foods.

Fat - Provides energy, thermal insulation, protection for vital organs, and carries fat soluble vitamins in the body. Per gram, fat provides more energy than either carbohydrate or protein.

Vitamins - Compounds that the body needs in very small quantities. They regulate metabolic functions.

Minerals - Chemical elements other than carbon, hydrogen, oxygen, and nitrogen that make up the body.

What is food?

Food is NUTRIENTS. Since we need nutrients to live, we eat food. Different foods have different amounts of the nutrients. All of the nutrients are listed above. We know that we need to get a certain amount of each nutrient for optimal health. The Food Guide Pyramid was designed to help us translate nutrient needs into food needs. (See the USDA web site, noted in the first paragraph, for details about the pyramid.)

The food label is another tool that will help us translate nutrient needs into food needs. It lists the food's content of fat, carbohydrate, protein, fiber, sugar, Vitamin A, Vitamin C, Calcium and Iron in one serving of that food. Using the label we can determine the percentage of calories from Fat, carbohydrate, protein; we can add the total grams of dietary fiber and determine the percentage of carbohydrate that is sugar. Calculating these figures will tell us whether the foods in our diet meet the dietary recommendations set forth by the government.

Recommended nutrient composition of the diet:

Carbohydrate = 55 to 60% of calories

Fat = < 30% of calories

Protein = 15 to 20% of calories

Fiber 25 to 30 grams per day

Sugar = use in moderation

Vitamin A, Vitamin C, Calcium, Iron = nutrients that are of concern for most Americans

More about Carbohydrate

The brain uses simple carbohydrate for energy. The brain in a body at rest uses about 15% of the total energy being used by the body while comprising only about 2% of the total body weight. Since the brain has practically no energy storage capacity it must derive energy from the stored carbohydrate in the muscles or liver or from ingested food. Intake of simple carbohydrates, particularly candy or soda, causes a peak of sugar in the brain and body which results in energy bursts. This is usually followed by a decrease of carbohydrate to the brain and a sluggish feeling. Complex carbohydrates have a slightly more even absorption rate, especially when eaten as whole grains or other high fiber foods. The fiber slows down nutrient absorption.

More about Proteins

Protein is the nutrient that provides structure to cells in all body systems. Damaged cells are repaired by replacing damaged protein molecules with new ones. The body's protein requirements are surprisingly low. For children and adolescents, the need is proportionally higher because of the rapid growth rate. Despite popular beliefs, high protein intake does not result in faster muscular growth. In diets that recommend protein be taken in place of carbohydrate for a variety of promised outcomes, the body must convert protein to carbohydrate to use for energy. In a high carbohydrate diet the body uses carbohydrate for energy and uses protein for growth, maintenance, and repair.

More about Fats

Some fats are essential nutrients, so there is a need for ingesting them. Americans tend to ingest far too much fat, resulting in its reputation as a bad food component. The USDA information discusses the role of fat in obesity and the role of obesity in health problems. Basically, eating too much (of any nutrients) and exercising too little often results in obesity. Fat has more calories per gram so it's easier to ingest more calories than needed. Saturated fat also correlates with heart disease, which is one of the most deadly diseases in the United States.